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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,595	10/31/2003	Howard M. Thomson	58584.US/1458.7 1884	
408	7590 10/25/2004	EXAMINER		INER
LUEDEKA, NEELY & GRAHAM, P.C.			WRIGHT, ANDREW D	
P O BOX 1871 KNOXVILLE, TN 37901			ART UNIT	PAPER NUMBER
12.011.122	,		3617	
			DATE MAILED: 10/25/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	10/699,595	THOMSON, HOWARD M.			
Office Action Summary	Examiner	Art Unit			
	Andrew Wright	3617			
The MAILING DATE of this communication app					
Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status		•			
1) Responsive to communication(s) filed on 23 A	ugust 2004.				
,	·				
·	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.				
Disposition of Claims					
4)  Claim(s) 1-8 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5)  Claim(s) is/are allowed.  6)  Claim(s) 1-8 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/or election requirement.					
Application Papers					
9) The specification is objected to by the Examiner.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Do 5) Notice of Informal F 6) Other:				

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1, 2, 4, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomson (US 3,799,093) in view of Gonzalez (US 3,779,192) and Shorter, Jr. (US 3,967,569). Thomson shows a float system. An individual float of the system comprises a foam core (12), concrete (18) encasing the core, wire mesh (column 3, lines 24-26) for reinforcing the concrete, and pretensioned cables (34). Thomson does not disclose that the core encased within a polymeric coating and does not disclose that the mesh and pretensioned cables are corrosion resistant. Shorter shows a float unit similar to Thomson in that is has a foam core and concrete casing. Shorter teaches that cracks may occur in the concrete below the waterline (column 4, lines 57-65). Gonzalez shows a float unit similar to Thomson in that is has a foam core and concrete casing. Gonzalez teaches discloses wrapping the foam core in polyethylene (column 5, lines 45-50) for the purpose of protecting the foam from corrosives in any water that should come into contact with the foam. With the teaching of Shorter that concrete can crack and expose the foam to water, and with the teaching of Gonzalez to protect the foam from water damage, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Thomson by

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adding a polyethylene coating around the foam core. The motivation would be to protect the foam core from water damage should the concrete crack. Furthermore, Gonzalez teaches that the reinforcing members in the concrete can be galvanized steel (column 4, lines 8-11). The use of galvanized steel is well known and common for corrosion protection. Therefore it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Thomson by making the mesh and cables (34) from galvanized steel. The motivation would be corrosion protection.

- 3. Claim 2, Thomson discloses sleeves for receiving post-tensioning rods (88) for interconnecting units (column 4, lines 55-61). The sleeves are chaseways.
- 4. The limitations of claims 4, 6, and 7 are present in the modified invention of Thomson as described above with respect to claims 1 and 2.
- 5. Claims 3, 5, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thomson in view of Gonzalez and Shorter as applied to claims 1, 4, and 6 above, and further in view of Rytand et al. (US 6,450,737). Thomson in view of Gonzalez and Shorter does not disclose a vent extending from the core to an exterior surface of the concrete and in communication with the atmosphere. Rytand shows a dock unit comprising a foam core that is mostly encased in concrete. Rytand shows chases (44) through which utility lines can be inserted. The utility line necessarily have to exit the dock unit to be usable, so the chases (44) inherently open to atmosphere. It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify Thomson by adding chases through the foam core for inserting and routing utility lines. The motivation would be to provide hidden routing for lines.

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## Response to Arguments

- 6. Applicant's arguments filed 8/23/04 have been fully considered but they are not persuasive. Applicant argues that the 35 USC 103 rejection of claims 1, 2, 4, 6, and 7 does not establish a prima facie case of obviousness (Remarks or 8/23/04, page 4). Applicant argues that there is no motivation to combine (Remarks, page 5), and that the cited motivation is based upon hindsight reconstruction (Remarks, page 4).
- Applicant argues that combination of Thomson in view of Shorter and Gonzalez 7. lacks sufficient motivation since Shorter does not attribute any negative to the development of cracks. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it is asserted that the skilled artisan will recognize that cracks in the concrete will lead to exposure of the encased foam to water. This is knowledge that is generally available to the skilled artisan. And the skilled artisan will recognize from Gonzalez that exposure to water can lead to exposure to acids and corrosives which can attack the foam. This is knowledge that is both generally available to the skilled artisan and taught by Gonzalez. Therefore, the modification of Thomson in view of Shorter and Gonzalez has sufficient motivation. Therefore the rejection is proper.

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8. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

#### Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication should be directed to examiner Andrew D. Wright at telephone number (703) 308-6841. The examiner can normally be reached Monday-Friday from 9:00 - 5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, S. Joe Morano, can be reached at (703) 308-0230. The fax number for official communications is 703-872-9306. The fax number directly to the examiner for unofficial communications is 703-746-3548.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Andrew D. Wright Patent Examiner Art Unit 3617

ANDREW D. WARNER